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ABSTRACT

A profile of Ghana is sketched in this paper. Emphasis is placed on the nature, scope, and accomplishments of population activities in the country. Topics and sub-topics include: location and description of the country; population (size, growth patterns, age structure, urban/rural distribution, ethnic and religious composition, migration, literacy, economic status, future trends); population growth and socio-economic development (relationships to national income, size of the labor force, agriculture, social welfare expenditures); history of population concerns; population policies; population programs (objectives, organization, operations, research and evaluation); private efforts in family planning; educational and scientific efforts in population; and foreign assistance for family planning activities. (RH)

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Country Profiles

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October 1970

GHANA

THIS profile was prepared by S. K. Gaisie, Demographic Unit, University of Ghana, and S. B. Jones, Principal Assistant Secretary, Ministry of Finance and Economic Planning, with the collaboration of Dr. J. C. Caldwell of the Population Council and Gordon W. Perkin, M.D., of the Ford Foundation.

Location and Description

Ghana lies in the hot, moist lowlands of West Africa. Cocoa, timber, industrial diamonds, bauxite, manganese dioxide, coffee, and gold make Ghana one of the richest countries in tropical Africa (1960 per capita income was estimated at US$170; 1968 per capita income, US$235). However, the wealth is not evenly distributed geographically. Cocoa and timber, both in the South, accounted for over 70 per cent of the country's exports in the late 1950's and early 1960's. The savannah country in the North has no such cash-export products. This dichotomy is reflected in many social and economic aspects of the population. The southern three-fifths of the country contain four-fifths of the population. The population in the South is better educated, subject to lower mortality, more likely to live in towns, more likely to know about contraception, and less likely to be predominantly concerned with the growing of subsistence crops, than the population in the North. These differences are acknowledged by present development efforts which concentrate on the less developed areas of the country in order to achieve a more uniform standard of living.

By tropical African standards Ghana is highly urbanized, one-quarter of the population being in centers with over 5,000 inhabitants in 1960 (a reasonable criterion because in centers over 5,000 more than half the work force is outside agriculture).

Ghana achieved independence in 1957, and was the first tropical African colony to do so. The overthrow of an authoritarian government in 1966 left the military administration and much of the populace anxious to find pragmatic solutions to Ghana's problems of development. The first national election, held in August 1969, resulted in a popular, majority government.

The Population

Size and Growth Patterns

One of the most significant features of Ghana's population is its rate of growth. In 1921 the country had a population of just over 2 million, and by the first quarter of 1960 the population had reached 7.1 million; thus, it more than tripled in the short period of 40 years. Although data for the early part of the century are not reliable, the figures indicate that Ghana's population increased at an average annual rate of 2.8 per cent between 1921 and 1960. According to census data this rate increased to over 4 per cent per annum in the period between 1948 and 1960. Estimates, however, indicate that the plausible rate of natural population growth during this period was actually between 2.7 and 3 per cent per annum. Population estimates for 1970 and 1980 are 9.5 million and 13.6 million persons, respectively. These figures reflect a doubling of the population in only 20 years. Preliminary census figures for 1970, which have been released, indicate a total population count of 8.5 million. (This figure has not been adjusted.)

Ghana's crude birth rate is currently estimated to be between 47 and 52 per 1,000. The total fertility rate is between 6.5 and 7.5. The crude death rate and infant mortality rate were estimated at 23 per 1,000 and 160 per 1,000 live births respectively in 1960. Maternal mortality was estimated at about 10–12 maternal deaths per 1,000 deliveries. The life expectancy at birth was probably about 40 years in 1960. These vital rates are based on retrospective data collected in 1960, and although they indicate the existence of a comparatively high death rate in Ghana, this rate has been declining rapidly as a result of the widespread application of preventive and curative medicine. Preliminary data from a national fertility survey completed in 1970 suggest that by 1968 the crude death rate had fallen to about 17 per 1,000, representing an average decline of three-quarters of a point each year since 1960. The rate of natural increase thus ranged between 3.0 and 3.5 per cent per annum between 1967 and 1969.

Redistribution

In 1960 nearly 12 per cent of all Ghanaians lived outside the regions in which they were born. The Greater Accra, Ashanti, and Brong Ahafo regions attracted more people than they lost to the other regions during the

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intercensus period 1948 1960. During this same period the Northern and Upper regions, and the Volta region lost about 157,000 and 95,000 people respectively. These inter-regional migrations indicate that in Ghana as elsewhere, people are moving from the less developed parts of the country to the more economically advanced areas.

Urban Rural Distribution

Centers with over 5,000 inhabitants included 23.1 per cent of the population in 1960 and probably close to 30 per cent by mid-1969. Three major centers with more than 100,000 inhabitants (Accra-Tema, Kumasi, and Sekondi-Takoradi) comprised 7.7 per cent of the population in 1960 and probably 10 per cent in mid-1969. Accra-Tema and Sekondi-Takoradi are the most important centers of social change. The great majority of the town population is distributed along the coast and in the cocoa-growing areas in the South.

Religious and Ethnic Composition

In 1960, 43 per cent of the population were Christian, 38 per cent traditionalist, 12 per cent Muslim, and 7 per cent reported no religion. The traditional sector is declining fairly rapidly and remains more important in the North than elsewhere. Among the Christian population at least two-thirds are Protestants. Religious divisions are not marked and are unlikely to create fertility differentials.

The great bulk of Ghana's population continues to be of indigenous African origin. There are small minority groups of Europeans, Lebanese and Syrians, and other Asians; however, the proportion of Africans among the Ghanaian population has never fallen below 99 per cent since 1921.

Although the 1960 population census revealed that 12.3 per cent of the total Ghana population were foreigners, about 96 per cent of the foreign-born immigrants hailed from the nearby African countries of Togo, Upper Volta, and Nigeria. There is no doubt that the number of foreigners has decreased considerably as a result of the enforcement of immigration laws by the present government. Unfortunately, the number of foreigners who left the country since the Alien Compliance Order of 2 December 1969 is not known.[1]

Economic Status

In 1960, 83 per cent of the males and 54 per cent of the females over 15 years of age were working. Of the employed, 64 per cent of the males and 58 per cent of the females were in agriculture or fishing. Throughout the South, more than half the rural labor force was employed in a form of farming in which cash sales were important, with this proportion falling to less than one-fiftieth in the North.

Literacy

In 1960, 21 per cent of the population over ten years of age had been to school, and the proportion probably increased to over 30 per cent by mid-1969. Male school enrollments and literacy rates are about twice those of females but fall to under one-and-a-half times the female rates in the youngest age groups. At present literacy rates are probably above 50 per cent in the major towns, about 33 per cent in the rural South, and less than 10 per cent in the North.

Future Trends

The most recent population projection,[2] assuming unchanged fertility, showed a 1970 population of 9.5 million, a 1980 population of 13.6 million, a 1990 population of 19.7 million, and a 2000 population of 28.9 million. This projection also showed that if fertility fell by 50 per cent between 1975 and 2010, the population at the end of the century would be about 24.4 million. Constant fertility would lead to a rate of natural increase of about 4 per cent per annum by the end of the century. The average rate of growth would increase from about 3.0 per cent in 1960 to 3.6 per cent between 1970 and 1975 and would exceed 4 per cent in the year 2000. A linear decline in fertility by a total of 50 per cent between 1975 and 2015 would decrease the average rate of growth to 2.7 per cent by the year 2000. The population of Ghana would double every 30 years or every 17 years on the assumptions of declining and sustained fertility respectively. Urban population projections[3] indicate that half the population will be living in towns by 1987, with Accra's population exceeding 1.5 million.

Social-Economic Groups and Attitudes

The several surveys conducted among urban and rural communities provide information on family planning knowledge, attitudes, and practices (KAP) in Ghana. Studies done in 1965 and 1966 indicate that 94 per cent of Ghanaian women wanted four or more children. Between 25 per cent and 33 per cent of the rural respondents and about 50 per cent of the urban sample did not want the large family traditional in Africa. In the urban areas about 85 per cent of the women with post-secondary or university training and in the rural areas 21 per cent of women with no schooling preferred "small" families (less than seven children). About 50 per cent of the uneducated rural women but less than 10 per cent of the urban women with no post-primary schooling favored a family of more than seven children.

The results of these surveys also indicate that knowledge of some method of contraception is relatively widespread; however, many of the traditional methods are ineffective and the use of the more modern methods is still very limited.

In Accra 11 per cent of all women knew of some method of birth control. Among women with secondary education 28 per cent knew of a method; among women with middle school, 19 per cent did. Among the urban elite 65 per cent of women with secondary education and 44 per cent of those with less than secondary education

[1] The socio-economic implications of the sudden departure of large numbers of aliens following the enforcement of the Alien Compliance Order of December 1969 are recognized. Studies are underway to determine both the short term and the long term effects on the economy and on the rate of population growth. However, many of the aliens were self-employed and it is likely that the short term effect on unemployment will not be significant. Furthermore, Caldwell has shown in his projections that fertility rather than immigration is the principal determinant of long term population growth in Ghana. The age structure of the population is also unlikely to be significantly affected by the departure of large numbers of aliens since the evidence suggests that they were producing children at almost the same rate as the indigenous population and in most cases the alien worker left Ghana accompanied by his dependents.

[2] S. K. Gaisie, *Dynamics of Population Growth in Ghana.*

[3] J. C. Caldwell, "Population Prospects and Policy" in *A Study of Contemporary Ghana*, Vol. II, edited by Birmingham *et al.*

were familiar with some method. In 1965 and 1966 when these surveys were conducted, organized family planning clinics were virtually nonexistent in the country and consequently none of the urban male and female elites knew of the intrauterine device (IUD) and only 2 per cent of each sex group possessed some knowledge about oral contraceptives (including tablets and other medicines for female hygiene).

It was observed that 23 per cent of the rural respondents, 65 per cent of the urban male elite, and 54 per cent of the urban female elite wanted to know more about family planning.

The results of the KAP studies indicate that the knowledge of, attitudes toward, and practice of family planning vary according to the educational background of the respondents, urban or rural residence, and area of birth. The recently completed national fertility survey is likely to show a substantial increase in the proportion of respondents familiar with both the oral contraceptive and the IUD.

Relationship of Population Growth to Social and Economic Development

Relationship to National Income

It has been calculated that, with net external investment at zero, per capita income would fall between 1960 and 1985 by 8 per cent with constant fertility, but would rise 9 per cent with fertility declining by 1 per cent per annum and 24 per cent with fertility declining by 2 per cent per annum.[4] It has recently been argued that the only economic alternative to fertility decline is massive external investment and that this is a risky long-term policy.

Relationship to Size and Quality of the Labor Force

Approximately 40 per cent of Ghana's total population and about 75 per cent of the adults—about 3.5 million—comprise the active labor force. In the long run the growth of the labor force is determined by the rate of population growth; to the extent that this rate can be checked an over-rapid growth of the labor force will also be avoided.

The labor force has been growing more rapidly than the opportunities for gainful employment. During the next five years about 800,000 persons of working age will be added to the labor force, bringing the total to about 4.3 million. Allowing for deaths and retirements, at least 130–140 thousand new workers from all sources, including immigration, may be expected to enter the job market each year. Most of the new workers will be young people, many drifting from rural to urban areas, more and more of them with some education. Mounting unemployment is a critical problem.

The distribution of the labor force among the nation's industries provides an index of the dimensions of Ghana's employment problems and the level of industrial development. About two million persons—55–60 per cent of the labor force—are engaged in agriculture and related pursuits, including an estimated 55–60,000 in forestry and 65,000 who obtain their livelihood from fishing. Probably 400–500,000 persons are employed in very small establishments, in petty trade (mostly women), in motor transport and maintenance, in domestic and personal services, and in other individualized occupations. Outside these categories there are more than 490,000 employees in private establishments with five or more workers, according to a count by the social security system. About 100,000 are employed in public services, including more than 50,000 teachers. These are included among roughly 600,000 persons—about 17 per cent of the labor force—who work for wages and salaries in the more highly organized enterprises and activities of both public and private sectors. These estimates leave a residual of about 400,000 which includes some who are fully or partially self-employed, and the unemployed.

The modern sectors of employment, whose output is crucial for the growth of the national product, supply jobs to only about 10 per cent of the labor force. Recorded employment in establishments with ten or more workers has shown little recent change. The private establishments in this group, whose expansion is unlikely to exceed 10 per cent per annum in value output for the next five years, now employ only a few more than 100,000, and any aggregate expansion in their employing capacity will be small as compared with the number of employables who will reach working age each year.

Projections show that the indigenous labor force will increase at the rate of 2.8 per cent annually between 1965 and 1970 and at the rate of 3.7 per cent per annum in the period following 1970. At these rates the number of workers will reach 8.7 million in 1995 and 18.6 million in 2015. On the assumption of declining fertility the rate would be reduced to 3.5 per cent between 1990 and 1995 and to 3.0 per cent per annum after 1995, thus increasing the labor force from 8.6 million in 1995 to 15.6 million in 2015.

Declining fertility can have little effect on the supply of labor for 15 years. Thereafter, however, the labor force would grow less rapidly and it would be less difficult to improve its quality and stem the growth of unemployment. Meanwhile an increasing number of women would be gainfully occupied since a smaller number of them would be nursing babies and looking after small children than would have been the case if fertility had remained high.

Relationship to Agriculture

The bulk of the nation's labor force for many years will find employment in agriculture and closely related activities. For the immediate future the elasticity of employment opportunity and the levels of manpower utilization in agriculture will depend mainly on the success of the government's programs in inducing rising productivity, expanding markets, and providing needed supports to improve the economic position of farmers.

Projections for a five-year period envisage an annual increase of the gross domestic product (GDP) in the agricultural sector within the range of 3–5 per cent. At the same time the population will increase at an annual rate of 3 per cent or more.

The distinction between the size of the labor force and the concept of employment in agriculture is a hazy one since there is no way of estimating the intensity of employment (i.e. the degree of underemployment) among the farming population. It may be reasonably assumed that even the marginal workers in the agricultural sector engage in some amount of useful work at various times over the

[4] John C. Caldwell, *ibid.*

period of a year—the amount of work being dependent on weather and crop conditions.

If the spread of better farming methods and the improvement of physical inputs are delayed or limited in scope, then the increase in agricultural production will depend on putting more land under cultivation thus requiring larger quantities of labor and tending to curb the excessive migration of rural dwellers to the towns. Under the most favorable conditions agricultural employment cannot be expected to absorb more than the natural increase in the farm labor force, which will be in the order of 50–60,000 per year, and the actual absorption may be far less.

As modernized agriculture is achieved, fewer and fewer people will be engaged directly in farm production, while more and more will find work in the assembly, storage, transport, distribution, processing, and financing of farm products, in supply of tools and materials, and in related activities.

Estimates indicate that agriculture accounted for about 50 per cent of the GDP in 1961 and that there has been no significant change in this proportion since 1955. The local food consumption also accounted for about a third of the GDP between 1955 and 1962.

The rural population was slightly over 5 million in 1960 and in comparison with the urban population was declining by 1 per cent per annum. With constant fertility it would be 8.3 million in 1985 and 10.7 million in 2000; with fertility declining by 1 per cent per annum it would be 7.8 million in 2000; with fertility declining by 2 per cent per annum it would be 7.3 million in 1985 and 7.0 million in 2000.

Relationship to Public Education

Ghana's educational establishment has expanded at a spectacular rate, more rapidly than the economy and at great cost. Public outlays for education rose from N₵34.4[5] million in 1961–62 to N₵81. million in 1967–68, which was then 20.5 per cent of total government expenditure.

Enrollment in primary schools more than doubled between 1960–61 and 1964–65, rising from 441,000 to a high of 1.4 million. It has leveled off at slightly more than one million since the military coup. Middle schools have expanded each year, increasing enrollment by some 160 per cent, from 145,000 in 1960–61 to 382,000 in 1968–69, while enrollment in secondary schools has tripled from 16,500 to 46,500. The three universities have nearly quadrupled enrollment since 1960–62, expanding from 1,378 to 5,053 in the school year just ended.

About 70 per cent of those of primary and middle-school ages are now in school.

There were 1.8 million children of school age in 1960. This number will increase to 4.6 million in 1985 with constant fertility, or 4.1 million if fertility is reduced by 1 per cent per annum, and 3.7 million if fertility were to decline by 2 per cent per annum. To have all children in school by 1985 would require a five-fold increase in school facilities between 1960 and 1985 with constant fertility; with fertility falling by 1 per cent per annum, an increase of 4.6 times; and with fertility falling by 2 per cent per annum, just over four times as many schoolrooms and teachers as existed in 1960.

Relationship to Public Health

Public health measures are among the major factors that have contributed in recent years to reductions in the crude death rate by as much as three-quarters of a point per year. Consequently with constant fertility the rate of natural increase will probably reach 4 per cent by 2000. The Government's development program calls for the phased extension of health services. Thus mortality is likely to continue to decline, particularly in rural areas where preventive health measures are being introduced as quickly as facilities and personnel become available.

Ghana currently spends over US$2.65 per capita on health services. The cost of the National Family Planning Programme could largely be met from the savings in increased health expenditures resulting from fewer babies. Alternatively with reduced fertility the per capita health expenditures could be increased, presumably contributing to a further improvement in the health of the population.

Development of a Population Policy

Concern about Ghana's high rate of population growth first arose after the release in late 1961 of the 1960 census total population figure showing that the population had increased by two-thirds since the 1948 census, an average annual rate of increase of 4.2 per cent. The Bureau of Census pointed out that some of the increase was from immigration and that the 1948 census was probably defective. The Bureau then erred on the cautious side by assuring the planners that the growth rate was only 2.5 per cent per annum, although subsequent analyses have shown that it was undoubtedly higher than this.

President Nkrumah believed that the high population growth rate could be accommodated by the economy he was building, but in 1963, in the Seven-Year Development Plan, the Ghanaian planners warned that the high rate of growth would put serious strains on the economy. In 1965 the President established an Inter-Departmental Committee to consider a population policy for Ghana.

Definite steps toward formation of a population program were initiated by the 1966–1969 Military Government, which was left saddled with large national debts. The Commissioner of Economic Affairs was the driving force in population reform. Formerly Chairman of the Economic Committee of the National Liberation Council, Mr. E. N. Omaboe had been a director of the study sponsored by the Ghana Academy of Sciences and the Ford Foundation, which resulted in a report published in 1966 and 1967 as "*A Study of Contemporary Ghana.*" The study drew attention to the economic savings that could be achieved by reducing the growth rate.

The Two-Year Development Plan, published in the summer of 1968, contained a brief reference to the Government's intention to establish family planning services. During that same year the newly created Ghana Manpower Board advised that the rate of population growth must be retarded or the needs of mounting numbers would blunt the drive for accelerated development and thwart the efforts to attain higher levels of employment and welfare. After preliminary studies the Manpower Board prepared a

[5] N₵1.00 is roughly equivalent to US$1.00.

broad statement of national population policy. The statement was approved by the National Liberation Council, and was published in March 1969 as an official policy paper, "Population Planning for National Progress and Prosperity,"[6] the major policy recommendations of which follow:

I. A national population policy and programme are to be developed as organic parts of social and economic planning and development activity. Details of programmes are to be formulated through the collaborative participation of national and regional entities, both public and private, and representatives of relevant professions and disciplines.

II. The vigorous pursuit of further means to reduce the still high rates of morbidity and mortality will be an important aspect of population policy and programmes.

III. Specific and quantitative population goals will be established on the basis of reliable demographic data and the determination of demographic trends. To this end steps will be taken to strengthen the statistical, research, and analytical facilities and capabilities of the Government and of public and private educational and scientific organizations.

IV. Recognizing the crucial importance of a wide understanding of the deleterious effects of unlimited population growth and of the means by which couples can safely and effectively control their fertility, the Government will encourage and itself undertake programmes to provide information, advice, and assistance for couples wishing to space or limit their reproduction. These programmes will be educational and persuasive, and not coercive.

V. Ways will be sought to encourage and promote wider productive and gainful employment for women; to increase the proportion of girls entering and completing school; to develop a wider range of non-domestic roles for women; and to examine the structure of Government perquisites and benefits and if necessary change them in such ways as to minimize their pronatalist influences and maximize their anti-natalist effects.

VI. The Government will adopt policies and establish programmes to guide and regulate the flow of internal migration, influence spatial distribution in the interest of development progress, and reduce the scale and rate of immigration in the interests of national welfare.

VII. Provision will be made to establish and maintain regular contact with the development and experience of population programmes throughout the world through intensified relationships with international public and private organizations concerned with population problems.

The March 1969 statement firmly establishes a population policy which commits the Government to provide those who wish to restrict their family size with the means for doing it.

During the fall of 1969 Ghana returned to civilian rule with the election of a popular majority government. In January 1970 the Government considered the machinery proposed for Ghana's family planning program and gave its approval to the establishment of the program. In addition the cabinet authorized the necessary funds to finance the program.

National Family Planning Programme

The following section describes the organization and structure of Ghana's National Family Planning Programme which was approved by the Government in January 1970.

Goals and Objectives

The principal objective of the National Family Planning Programme is to reduce the rate of population growth in Ghana. Every effort will be made to assure public access to, and acceptance and continuation of, contraceptive use. Preliminary planning targets have been based on an estimate of the effort needed to keep the present rate of population growth from increasing in light of a falling death rate. These targets were based on the following assumptions:

(a) That the crude death rate could decline by as much as one point per year and that for each fall of one point in the death rate a comparable fall in the birth rate must occur to maintain a constant rate of growth.

(b) That as many as one-third of family planning acceptors and the same proportion of continuing users from previous years would discontinue contraception in a given year.

(c) That one birth would be prevented for each group of four users of effective methods during a year.

It is probable that the death rate may not decline as rapidly as predicted. In that event a program of the magnitude envisaged would not only keep the rate of population growth from increasing but could also initiate a modest decline in the annual rate of increase. It is also recognized that the preliminary planning targets are only an approximate estimate of the effort required and are to be further refined on the basis of program experience and additional demographic data as they become available.

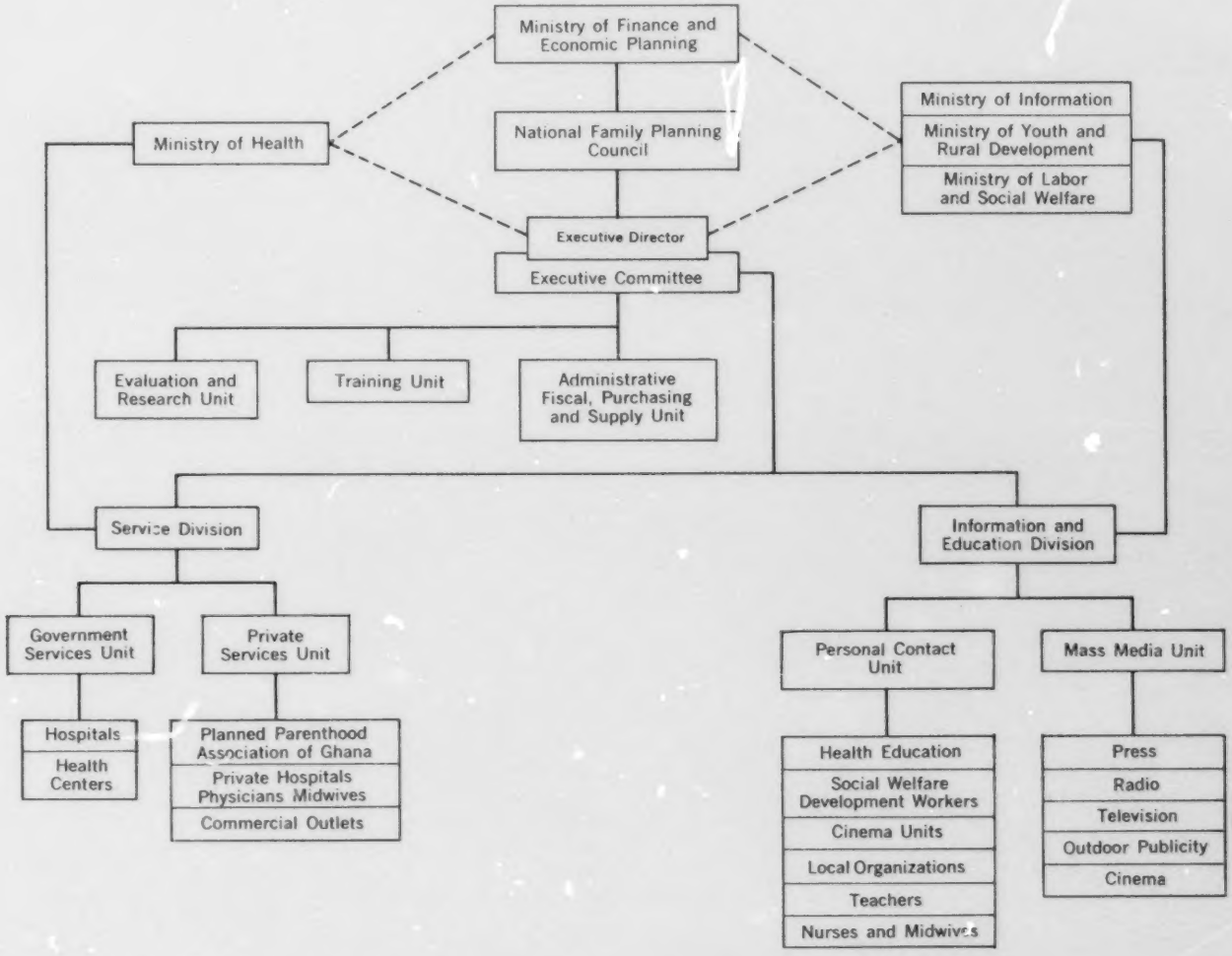
The planning targets that have been calculated on the basis of these assumptions are indicated in Table 1.

TABLE 1. *Planning Targets for Increasing the use of Contraceptives, Ghana*
(Figures are in thousands)

Fiscal year	Users at start of year	Acceptors during year	Total number of users during year	Users discontinuing during year	Users at end of year	Estimated births prevented
FY1970		54	54	18	36	9
FY1971	36	78	114	38	76	19
FY1972	76	96	174	58	116	29
FY1973	116	118	234	78	156	39
FY1974	156	144	300	100	200	50

[6] Summarized in *Studies in Family Planning*, No. 44, August 1969.

FIGURE 1. *Organization Chart, Ghana National Family Planning Programme, December 1969*



If the acceptor targets are achieved and the assumptions regarding discontinuation are correct, there will be about 200,000 continuing users at the end of the fifth year. This represents approximately 10 per cent of the expected female population in the childbearing ages.

ORGANIZATION AND RESPONSIBILITIES

The Office of the Director and the Secretariat for the National Family Planning Programme are a part of the Ministry of Finance and Economic Planning which includes the Government machinery for development planning. The National Family Planning Council is the advisory body through which the involvement of a wide range of public and private organizations are mobilized. The Council is not an operating agency. All Government ministries and private and volunteer agencies whose activities are relevant to family planning are represented on the Council.

Administrative continuity between Council meetings is provided by a seven member Executive Committee. The Ministries of Finance and Economic Planning, Health, Labor and Social Welfare, Information, and Youth and Rural Development, those Ministries most directly involved with the implementation of the program, are represented on the Executive Committee. The Executive Committee is responsible for directing the development of the program. The full time director of the program reports to the Minister of Finance and Economic Planning.

Two operating divisions are being established, one concerned with the provision of family planning services and the other responsible for information and education. The Service Division plans and coordinates the activities of the two units of the division, the Government Services Unit and the Private Services Unit (Figure 1). The Information and Education Division, headed by a professional in mass communications, plans and coordinates the activities of the two units of that division, the Personal Contact Unit and the Mass Media Unit. The Health Education Division of the Ministry of Health, the Ministry of Labor and Social Welfare, the Ministry of Youth and Rural Development, and the Ministry of Information will all be directly involved with the information and education program.

Three staff units directly responsible to the director are also being established. The Administration, Fiscal, Purchasing, and Supply Unit will prepare budgets, handle and account for program funds and be responsible for the ordering, storing, maintaining, and distributing supplies and equipment. The Training Unit has overall responsibility for planning and coordinating training programs for all categories of personnel involved in the program. The Evaluation and Research Unit will report at regular intervals on the results of the total program and be responsible for planning sample surveys on continuity of use of contraceptives and other questions of vital importance to the program's administrators.

The program will use existing institutions, facilities, and personnel in both the public and private sectors. The Ministry of Health has major responsibility for the provision of contraceptive services, for patient education, and for training of technical personnel involved in the service program. The Ministry of Information has major responsibility for mass information and education. The Ministries of Youth and Rural Development, and Labor and Social Welfare will be involved with education and recruitment. The Ministry of Education and the Ministry of Agriculture (the Extension Services Division) will participate in the information and education program. The Planned Parenthood Association of Ghana provides contraceptive services and will continue to play an important role in training workers and in public information. The support and active involvement of a number of additional agencies, institutions, and professional associations will also be enlisted.

Program Plan

A detailed plan for the education of the population and for the phased extension of services is being prepared during the early months of the program. The initial phase of the service program will concentrate on establishing family planning services in the larger Government hospitals. These hospitals are well-distributed geographically and can serve as training centers for medical and paramedical personnel. The initial training effort has begun with the preparation of job descriptions and task-oriented training materials for the several categories of personnel who will be involved. In as much as professional people, especially those working in the health professions, are in very short supply in Ghana, every effort will be made to assure that those working in the program will be assigned tasks and responsibilities according to their capabilities and training. Consistent with this policy, specially trained nurses and midwives are expected to provide a significant proportion of the available services.

An intensive and sustained information campaign, emphasizing both mass media and person-to-person communications will be developed to parallel if not precede the establishment of contraceptive services.

Supervision

Supervision of the family planning work will be planned and coordinated by the staff of the National Family Planning Programme but will be primarily the responsibility of the respective ministries. For example the Mobile Cinema Vans operated by the Ministry of Information are to be supervised by that Ministry even though they will be participating in family planning educational work. Rural development workers who will be actively involved in patient recruitment will be supervised by their superiors in the Ministry of Youth and Rural Development.

Incentives

Incentive schemes to improve staff effectiveness and to increase acceptance of contraceptives and their continued use are to be developed, tested and, where practicable, implemented. A preliminary trial of a nonmonetary commodity incentive has already been carried out by the Planned Parenthood Association. Field workers offered interested clients a coupon that could be exchanged for one two-pound tin of powdered milk if the woman came for family planning service within ten days. Patient returns increased from around 11 per cent during the control week to over 20 per cent during the weeks the free milk was offered. During the final week of the study the field workers were also offered an incentive—six tins of powdered milk for the worker referring the most new patients, four for the second, and two tins for the worker placing third. Patient acceptances increased to over 30 per cent of those referred and the total number of new patients was more than double that of the weeks when only the patient incentive was offered. The results of this preliminary trial suggest that in Ghana a combination of patient and worker incentives may significantly increase the proportion of interested patients who come for service thereby reducing the cost per new patient recruited.[7]

Personnel

The program plan recommends that the director of the program and the heads of the two major divisions and three staff units shown in figure 1, be full time officers. Initially some of these positions are likely to be filled by staff seconded from other Ministries.

Training

The Ministry of Health will be responsible for conducting training courses for medical and paramedical personnel engaged in technical aspects of the program. The facilities and staff of Korle Bu Hospital (Ghana Medical School), particularly its Department of Obstetrics, will play a major role in clinical training.

The Ministry of Youth and Rural Development is planning to conduct training courses for the more than 600 rural development workers. The regional training centers operated by this ministry will be used.

Programed instruction manuals developed in Thailand have been tested in Ghana and are being adapted prior to their introduction as an integral part of the training scheme. The Planned Parenthood Association will continue to provide training for its field workers. All training activities will be coordinated by the Training Unit of the National Family Planning Programme.

Information and Education

The Information and Education Division has responsibility for stimulating, coordinating, and helping to design and operate programs for general in-

[7] A preliminary report on this study, by Gordon W. Perkin, appears in *Studies in Family Planning*, 57: 12–15, September 1970.

struction. The goals of the division are: to provide the knowledge needed by couples to regulate their fertility; to acquaint people with the values of responsible parenthood; to inform the public about the goals and achievements of the National Family Planning Programme; and to keep Government officials and the public informed about the importance of family planning for economic development. The Personal Contact Unit is responsible for helping to design, produce, test, and distribute printed and audiovisual materials and for stimulating their use in person-to-person and small group discussions. The Health Education Division of the Ministry of Health will be an important partner in this endeavor. The Mass Media Unit is responsible for mounting and sustaining an information campaign, using all available media, to promote widespread knowledge about population growth and awareness of the respectability, availability, convenience, and safety of family planning. This unit will both produce programs and materials, and contract with appropriate private and public agencies for their production and dissemination. The Ministry of Information, its staff, and mobile cinema vans are to be a key part of the mass media effort.

The National Family Planning Programme has adopted an inverted red triangle as the national family planning symbol. The triangle will be prominently displayed on all literature, posters, clinics, and vehicles, and worn by family planning workers. It was introduced during Family Planning Week in August 1969.

Evaluation and Research

The Evaluation and Research Unit will be responsible for collecting, tabulating, interpreting, and reporting promptly at regular intervals, service statistics generated by the program. Special sample surveys may be jointly organized with competent local institutions. One of the first responsibilities of this unit is to design and test a clinic record-card and reporting forms that will be used throughout the program. The Demographic Unit at the University of Ghana, the Institute for Statistical, Social and Economic Research, and the Central Bureau of Statistics will be important collaborators in the evaluation effort.

Administration and Supply

The Administration and Supply Unit is responsible for budget preparation, financial control, and the ordering, storing, distribution, and maintenance of all supplies and equipment. This unit will also administer any incentive system that may be adopted.

Program Budget

The precise amount of local funds to be allocated to the National Family Planning Programme for its first full year of operation has yet to be decided. The budget that has been proposed is equivalent to about US$0.04 per capita for the first complete year of the program.

Foreign assistance requirements will increase over the first three years of the program as clinics are established, staff trained, and the need for new vehicles and foreign training met. In later years, the bulk of foreign assistance will probably be needed for the purchase of contraceptive supplies with the requirements for equipment and foreign training decreasing as the program becomes fully operational.

Current Prevalences of Birth Control Practice

Oral contraceptives are now available in the private sector but their high price, about NC1.60 per cycle, has limited their use to the highly-motivated middle class. It is estimated that between 10,000 and 12,000 cycles of oral contraceptives are sold through the private sector each month. Condoms are also available but the level of sales is not known. The IUD is available from Planned Parenthood clinics, Korle Bu Hospital, and a number of private physicians. About 7,000 women have received family planning services through the Planned Parenthood and church-related clinics. Vasectomy is almost unknown, and tubectomy is neither popular nor readily available. In light of the continuing high fertility, the large family size, and the limited access to modern contraceptives, it is likely that less than 5 per cent of fertile Ghanaian women are using a modern method of family planning at the present time.

The Ghanaian abortion law states that "any act which is done, in good faith and without negligence, for the purpose of medical or surgical treatment of a pregnant woman is justifiable, although it causes or is intended to cause abortion or miscarriage, or premature delivery, or the death of the child." On 25 June 1969 the crime of abortion was reduced from a first degree felony with a minimum ten-year prison sentence to a second degree felony subject to an indeterminate sentence not to exceed ten years or a fine. As in other countries Ghanaian women frequently resort to abortion which is not difficult to obtain, particularly in the urban centers.

Indigenous Supporting Resources and Institutions

Ghana Manpower Board

The Ghana Manpower Board came into existence in January, 1968. Chaired by the Commissioner of Economic Affairs, its broad functions were defined by Decree to include "review . . . (of) the policy of the Government on population and migration and advice on measures to be taken to ensure the fullest utilization of the human resources of the country." Executive and technical services are provided by the Ministry of Finance and Economic Planning. Preparation of the national population policy for Government approval was the first major undertaking of the board. The board was also responsible for developing the plan of organization and proposed machinery for the National Family Planning Programme described earlier. The board has continuing responsibility for development and guidance of national population policy in all of its aspects and will maintain a general surveillance of the family planning program and its relationship to national development.

Ministry of Health

The Ministry of Health is responsible for the provision, integration, and development of health services throughout the country. The Ministry has 13 technical divisions, including Maternal and Child Health and seven administrative support divisions. The Director of Medical Services is responsible for the day to day operations of the Ministry. Ghana is divided into nine regions with a total of 49 districts. Each regional health program is administered by a Regional Medical Officer of Health who super-

vises both preventive and curative services in the region. There are 42 Government Hospitals with about 6,000 beds. Both district and regional hospitals exist, with more specialized services available at the regional level. There are another 71 hospitals, with slightly under 4,000 beds, operated by mission groups, mines, other industries, and private practitioners.

There are 49 health centers—40 rural and 9 urban—designed to provide both preventive and curative services. Each health center is directed by a health center superintendent (medical assistant) and has a potential staff of up to six clinical nurses, two midwives, one public health nurse, two community health nurses, a nutrition officer, a sanitary inspector, and laboratory and dispensary assistants. In the rural areas the health centers are located in the small towns where there are no hospitals. Each serves a health area of about 150,000 population. The Ministry of Health plans to increase the number of rural health centers staffed with physicians who would supervise four or five rural health posts. At present there are only 14 rural health posts in operation. The development plan calls for one fully staffed and operating health area (health center and four or five health posts) in each region by 1973.

It is the Government's intention to extend the preventive and curative health services as quickly as possible to the two-thirds of the Ghanaian population not at present effectively covered.

About 75 per cent of all deliveries in Ghana take place at home and are supervised by untrained attendants. Of the remaining 25 per cent about 12 per cent take place in Government hospitals and health centers, 7 per cent in mine and mission hospitals, and 6 per cent in private maternity homes. Almost all supervised deliveries with the exception of complicated cases are the responsibility of the midwives. An average of 18,000 deliveries per annum takes place in the three largest Government hospitals. This represents slightly more than 4 per cent of the total annual number of births.

Health personnel. There are about 550 physicians in Ghana. Of these 349 are on the staff of the Ministry of Health. Two-thirds of the doctors on the Ministry of Health staff are Ghanaian with the proportion of expatriate physicians continuing to decline as Ghanaian graduates from both Ghana Medical School and overseas institutions enter Government service.

The Ministry of Health has just over 3,500 nurses and 550 midwives on its staff. About 25 per cent of the nurses have also received training in midwifery. In addition to the Government midwives there are nearly 800 registered private midwives who operate private clinics. The number of untrained practicing midwives is not known.

The nursing schools graduate about 130 State Registered Nurses each year from the three-year course. Qualified registered nurses are graduated from schools located in the smaller regional hospitals and mission hospitals. Midwives receive two and a half years training after ten years of school.

The Ministry of Health recognizes that the number of physicians is not sufficient to mount a vigorous family planning program particularly in the rural areas where health facilities as well as physicians are very thinly distributed. To help compensate for the shortage of physicians a group of senior nurse-midwives are to receive an intensive eight-week training course as family planning nurses. The course will emphasize clinical experience and will train the nurse-midwife specialist to operate family planning clinics under medical supervision. It is expected that this specially trained group will provide many of the family planning services available through the national program.

Central Bureau of Statistics

The Demographic and Social Statistics Division of the Central Bureau of Statistics is responsible for collecting and publishing basic demographic data. Census-taking was first introduced into the country by the Colonial Government in 1891 and from then on a census was taken every ten years until 1941 when World War II interrupted the sequence. It was not until 1948 that another census was taken. From the point of view of methodology and scope the early attempts to collect population data may be called "counts" rather than "censuses."

The 1960 census marked the beginning of a considerable improvement in census-taking in the country, particularly with respect to techniques, objectives and scope. The improvements reflected the positive attitude of the Government toward demographic and socio-economic data as tools for planning and administration. The 1960 census was a complete enumeration of the population in Ghana as of midnight, 20 March 1960. The questionnaire contained, in addition to name, 11 other items: address at time of enumeration, sex, age, place of birth, country of origin, tribe, school attendance, type of economic activity, industry, occupation, and employment status. Two months after the census a Post-Enumeration Survey was carried out on a sample of about 5 per cent of the total population. The main objectives of the survey were to measure coverage and content errors and to inquire into additional topics that could not be covered in the main census. Among the items covered were household size and structure, internal and external migration, religion, literacy, secondary occupation, economic characteristics of the unemployed, degree of employment, marital status and form of marriage (whether consensual or formal; if formal, whether under Traditional Law or British Code, etc.), number of wives, locality of residence of husband, fertility and mortality. Five complete volumes and several special reports have been published.

The 1970 census began on 1 March 1970. A field test and a trial census were conducted in September 1968 and in March 1969 respectively. The 1970 census will collect almost the same basic information as obtained in 1960 but there will be some major changes in the post-enumeration survey. It has been decided by the 1970 Census Advisory Committee that since information on fertility and mortality is being collected by the Demographic Unit at the University of Ghana, questions on these topics should be omitted from the post-enumeration survey so that a more intensive investigation of other items can be carried out.

Registration Department

This department, which records such facts as births, deaths, and migration,

is located in the Ministry of Local Government and will become important as the registration system is extended and improved.

The Demographic Unit

Demography was first introduced in the Sociology Department of the University of Ghana in 1959. In 1966 a separate Demographic Unit was set up within the department as a center for demographic research and instruction. The 1960 post-enumeration survey data on fertility and mortality have been analysed and released by the unit. Demography courses for B.A. and B.S. (Honors) sociology students are being conducted by the research fellows of the unit. This unit has just completed a national fertility survey.

A family survey conducted in 1961 covered such items as type of household, family structure, sanitation, kinship patterns, and fertility. Between 1962 and 1964 a survey program which included the following studies was undertaken with Population Council assistance: Rural-Urban Migration Survey; Internal Migration Survey; Population Attitudes in Economically Superior Urban Areas; and Population Attitudes in Rural Areas.

The "Ghana Fertility Survey" was conducted in 1965. This survey sought, among other things, information on fertility, marital history, exposure to intercourse, and attitudes toward, knowledge about and use of methods of family limitation. In 1966 a "Migration Survey" was conducted in the Eastern Region and Accra Capital District.

The Demographic Unit is presently engaged in a national demographic sample survey. Household size and composition, fertility, mortality, marital history of women, record of pregnancies, internal migration, attitude toward family size, and knowledge, attitude, and practice of family planning are among the major topics being investigated.

In 1967 a multipurpose survey of the Eastern Region of the country was conducted that provided some information on people's attitudes toward family planning, as well as estimates of fertility and mortality. Thus since 1961 there has been continuing research on demographic topics, including fertility control, and a large number of publications have been produced.

University of Ghana Medical School

Ghana Medical School graduated its first class of 40 physicians in 1969. The Medical School recognizes the important responsibility of physicians in the field of family planning. The Department of Obstetrics operates a family planning clinic at Korle Bu Hospital and has undertaken the clinical evaluation of several contraceptive drugs and devices. This clinic has recently joined the International Postpartum Programme and will play an important role in training physicians, nurses and midwives in the technical aspects of family planning. The Department of Preventive and Social Medicines has developed plans for a major five-year community medicine project. Family planning research and service will be an integral part of this program.

Private Agencies

The Planned Parenthood Association of Ghana. The Planned Parenthood Association of Ghana (PPAG) was formed in March 1967 and began providing contraceptive services early in 1968. The association has expanded rapidly; it employs full-time field workers and now has clinics operating in each of the major urban areas. More than 5,000 patients have received service in the clinics operated by PPAG. The association cooperates with the Department of Obstetrics at Korle Bu where its busiest clinic is held. PPAG will continue to play an important role in the developing national program. Training, patient recruitment and education, and direct clinic services will continue to be important parts of the PPAG program. The association is affiliated with the International Planned Parenthood Federation (IPPF) and has continued to receive almost all of its financial support from this agency. In addition through an Agency for International Development (AID) grant to IPPF, over US$200,000 will be available for contraceptive supplies in the fiscal year FY1969. These supplies will be sent through the Planned Parenthood Association for the National Family Planning Programme. PPAG's operating budget increased from about US$50,000 in 1968 to over US$110,000 in 1969. A major increase is also likely in 1970 as the association's program is extended into a number of rural areas and the number of full-time field workers is further increased.

Christian Council. The Christian Council of Ghana provides family planning services at five centers and supplies a number of church-related hospitals. About 1500 women received contraceptive services during 1968. The council is also active in family life education. Assistance has been received from IPPF and Church World Service.

Assistance from International Agencies

The Population Council

The Population Council helped develop and continues to support the demography program and the Demographic Unit at the University of Ghana. Total support to this unit will reach US$300,000 by 1972. The postpartum program at Korle Bu Hospital also receives support from the Council. It is expected that additional postpartum programs will also qualify for support during the year. Advisory services, particularly in demography, and fellowships for foreign training have also been provided.

Agency for International Development (AID)

AID has provided US$163,000 to support the Demographic Unit's national sample survey. During FY1969 about US$100,000 was also committed to support a variety of activities relevant to family planning including several awards for training in the United States. Preliminary funding for a community health and family planning project, to be undertaken by the Department of Preventive and Social Medicine at Ghana Medical School, was approved in FY1969. It is presently envisaged that this five-year project would receive technical assistance through a contract with the University of California, Los Angeles.

During the first few years of the national program it is expected that AID will be asked to provide a major share of the contraceptive supplies. Fellowships for training in the United States in population-related fields will also be available. Local currency generated by sale of American foodstuffs may be available to the National Family Planning Programme.

Ford Foundation

A Ford Foundation financed, advisory team from Harvard University is involved with economic planning in Ghana. The Manpower Board, responsible for the development of the population policy and for designing the National Family Planning Programme, has also had advisory assistance. A resident population adviser is presently assisting with the implementation of the national program. Additional short-term consultants have been provided on request from the Government. A number of travel and study awards have enabled several key groups of Ghanaians to visit family planning institutions in other countries. Distribution of the Government Population Policy has been facilitated by financial assistance from the Ford Foundation.

International Planned Parenthood Federation (IPPF)

IPPF is continuing to provide financial support to the Planned Parenthood Association. IPPF has also given some support to the Christian Council and a modest research grant to the Medical School. The Planned Parenthood Association has received short-term technical assistance from IPPF in planning and developing its program. Total IPPF assistance to these organizations during 1968 and 1969 is in excess of US$100,000 excluding substantial commodity assistance. IPPF's representative for West Africa is located in Accra.

Other

The private agencies and Mission Hospitals offering family planning services have received some contraceptive supplies from Pathfinder Fund and Church World Service.

Evaluation of Population Activities

Facilitating Factors

The farsighted, comprehensive, Government population policy adopted in March 1969 clearly sets forth the dimensions of the population problem and establishes the broad principles under which contraceptive services and other policy recommendations will be implemented.

Locating the National Family Planning Programme in the Ministry of Finance and Economic Planning with its Director a senior official in that Ministry assures the program of visibility, and of sufficient strength and status to work effectively with other government ministries and private agencies.

The Ministry of Finance and Economic Planning's overall responsibility for population planning helps to assure that important factors in addition to family planning will be considered in implementing the population policy. Stricter immigration policies, increasing employment opportunities for women, and several fertility disincentives have already been considered.

Incorporating the National Family Planning Programme as a part of the Government's development machinery suggests that population growth will be considered as one of the important variables in the development process that may be influenced by planning.

The decision to make full use of existing personnel, facilities, and institutions in both the public and private sectors will minimize duplication of effort and should encourage the best use of scarce resources.

The Demographic Unit at the University of Ghana and the Central Bureau of Statistics have played key roles in providing data that contributed to the development of the March 1969 population policy.

The Medical School is accepting its responsibility in population and family planning and will be an increasingly important resource as the program develops.

The Planned Parenthood Association of Ghana supports the government program and will continue to play a significant role in the National Family Planning Programme.

A number of government ministries, especially Health, Information, Youth and Rural Development, Labor, and Social Welfare, will be important participants in the action program.

The initial favorable reaction to the government policy and the machinery that has been designed to implement it suggest the development of a flexible, innovative and ultimately successful program.

A number of highly qualified and committed professionals are available to the program.

There has been no indication of any significant political, religious, or ethnic opposition to the National Family Planning Programme.

A number of international agencies have expressed interest in assisting the National Family Planning Programme.

Those associated with the planning and development of the program have shown a willingness to take advantage of successful experience from other countries.

Limiting Factors

Traditional values associated with large families and high fertility continue to be widely held.

The shortage of medical and paramedical personnel, particularly in the rural areas, will increase the difficulties of extending the current methods of family planning to the many areas where health facilities have yet to be developed.

Continuing high levels of infant mortality may inhibit the widespread acceptance of family planning as couples may be reluctant to limit family size while the risks of death for children already born remain high.

The continuing decline in the death rate means that a major effort will be necessary just to keep the annual rate of natural growth from increasing.

In view of the economic problems facing the country the National Family Planning Programme will require substantial foreign assistance for the foreseeable future.

Summary

This profile has summarized the population trends and current status of family planning in Ghana. A farsighted and comprehensive population policy has been adopted and a National Family Planning Programme whose secretariat is located in the Ministry of Finance and Economic Planning is being implemented. Full use will be made of existing facilities and personnel in both private and public sectors. The University of Ghana's Demographic Unit and the Medical School are contributing to the program. Excellent cooperation exists between the various Ministries and private agencies involved in the program. The willingness to adopt successful experience from other countries enhances the prospects of the program's success. However, the continued popularity of large families, the

low prevalence of contraceptive practice and a rapidly declining death rate suggest that a major program effort will be required just to keep the present high rate of population growth constant.

References

Addo, N. O. "Demographic Aspects of Manpower and Employment in Ghana." *The Economic Bulletin of Ghana*, Vol. XI, No. 3, pp. 3-34. (Reprints).

Birmingham, Walter, I. Neustadt, E. N. Omaboe (eds.). "Some Aspects of Social Structure." *A Study of Contemporary Ghana*, Vol. II. (London: Allen and Unwin, and Chicago: Northwestern University Press, 1967).

Brass, W., A. J. Coale, P. Demeny, et al. *The Demography of Tropical Africa* (Princeton University Press, 1968).

Caldwell, John C. *African Rural-Urban Migration: The Movement to Ghana's Towns* (Canberra: Australian National University Press and New York: Columbia University Press, 1969).

———. *Population Growth and Family Change in Africa: The New Urban Elite in Ghana* (Canberra: Australian National University Press, 1968).

Caldwell, John C. and C. Okonjo, (eds.). *The Population of Tropical Africa* (London: Longmans Green and Co., 1968).

Gaisie, S. K. *Dynamics of Population Growth in Ghana* (Ghana Publishing Corporation, Accra-Tema, May 1969).

Kpedepko, G. M. K., "The Eastern Region Demographic Survey." *Technical Publication Series of the Institute of Statistics* (New Times Press, Accra, 1969).

———. "Working Life Tables for Males in Ghana." *Journal of the American Statistical Association*, Vol. 64, No. 325. March 1969, pp. 102-110.

Republic of Ghana. *Population Planning for National Progress and Prosperity. Ghana Population Policy* (Ghana Publishing Corporation, Accra-Tema, Ghana, March 1969).

———. *Two Year Development Plan* (Ghana Publishing Corporation, Accra-Tema, Ghana, July, 1968).

———. *First Annual Report of the Ghana Manpower Board* (Ghana Publishing Corporation, Accra-Tema, Ghana, 1968).

———. *1960 Population Census of Ghana* Six volumes, special reports. From 1962. (Central Bureau of Statistics, and Ghana Publishing Corporation, Accra-Tema, Ghana).

University of Ghana, Demographic Unit. *Proceedings of the Conference on Population Growth and Economic Development in Ghana, 1968* (University of Ghana Press, Accra, 1969).

University of Ghana, Demographic Unit. 1968-1969 Demographic Sample Survey (unpublished data).

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